

Consuming a Web Service in Java using NetBeans IDE

This document provides step-by-step instructions to consume a web service in Java using NetBeans IDE. In the project, we will invoke a sorting web service through its WSDL link:
<http://vhost3.cs.rit.edu/SortServ/Service.svc?singleWSDL>.

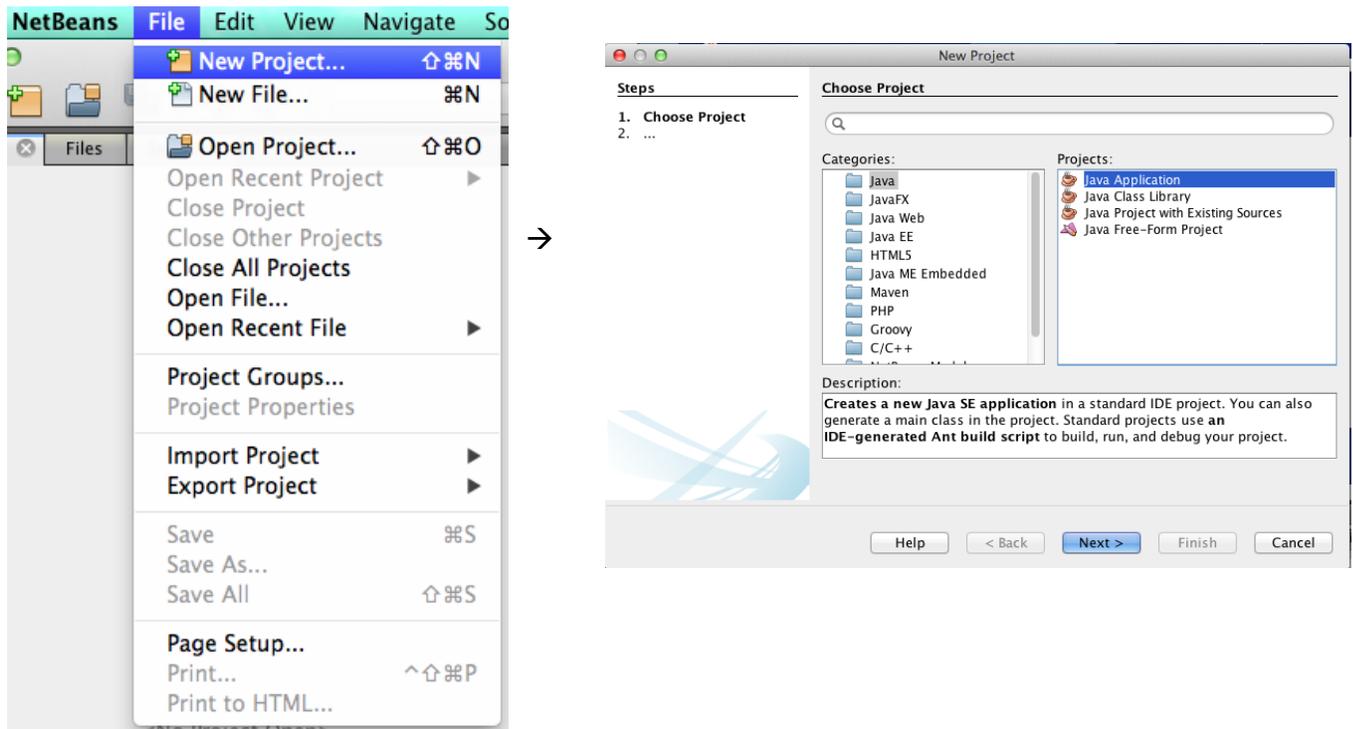
Prerequisites:

- NetBeans 8.0 IDE (Can be downloaded from here - [Link](#))

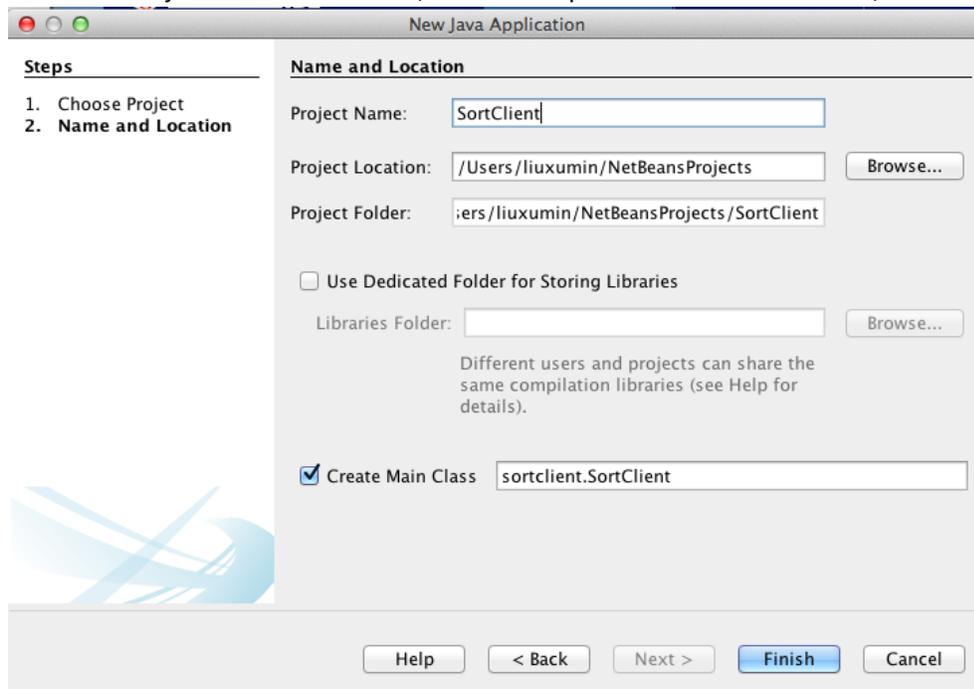
Step 1: Create a Java Project

Open NetBeans IDE

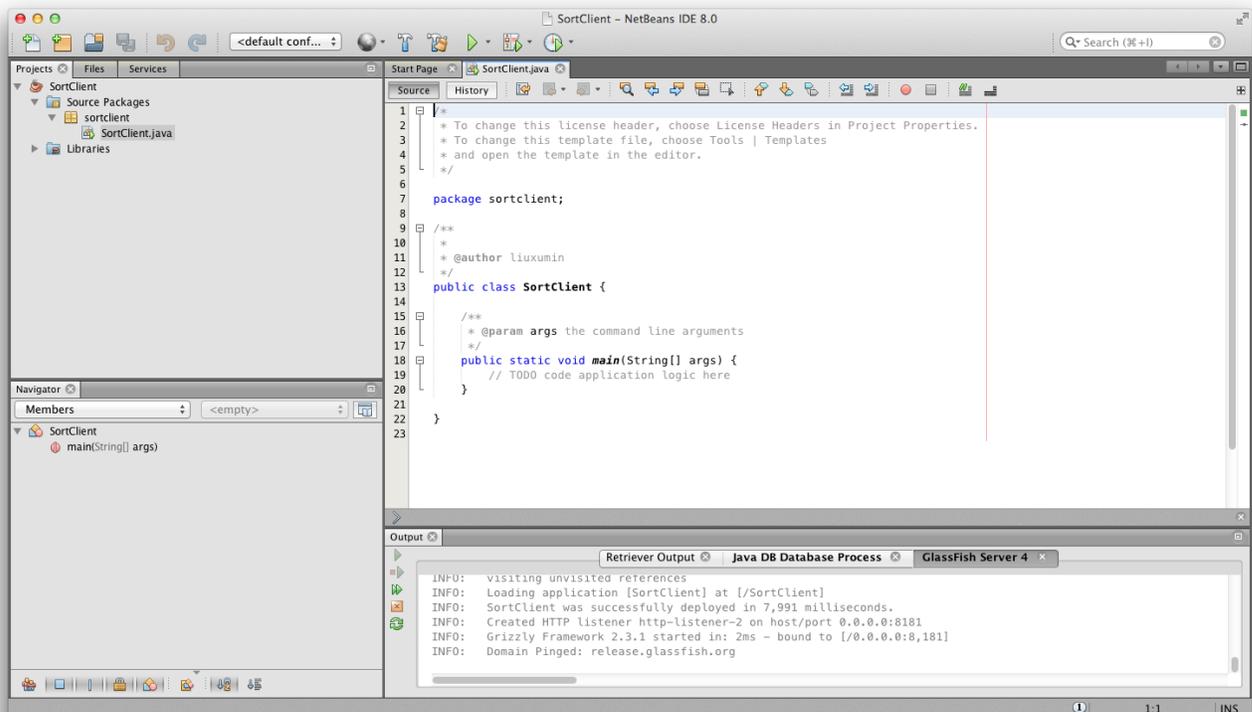
Click on New Project and choose Java Application



Enter the Project Name: SortClient, check the option “Create Main Class”, click “Finish”



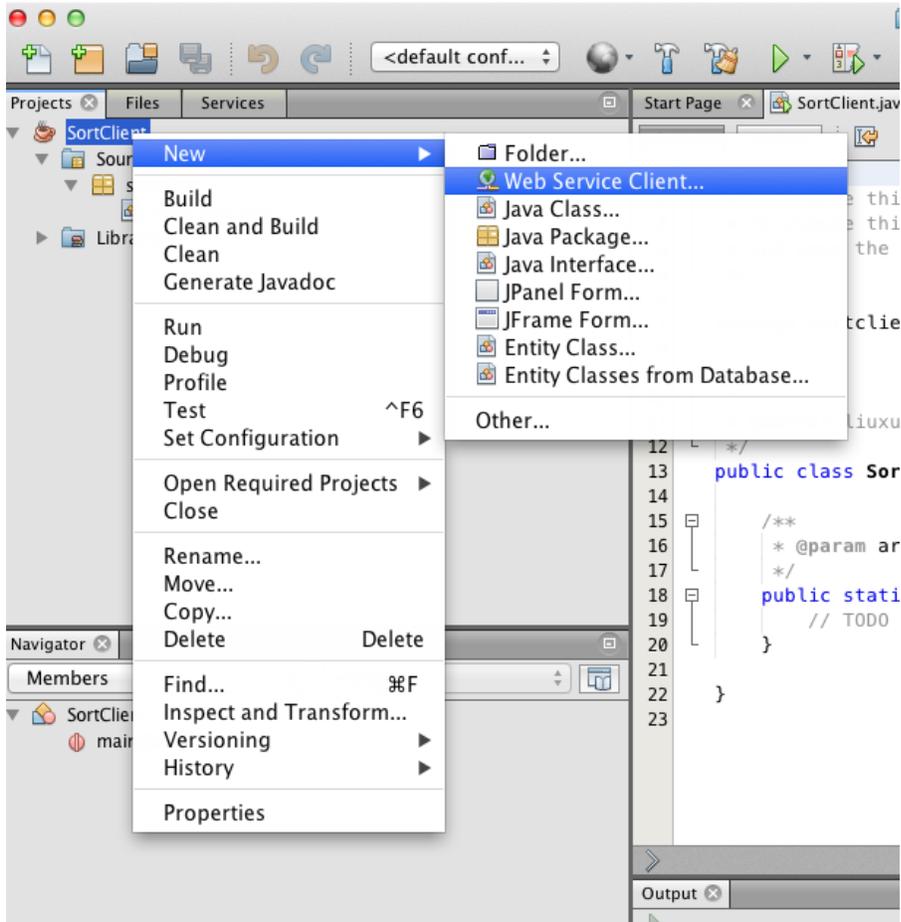
Now the Project has been created.



Step 2: Generate a Web Service Client

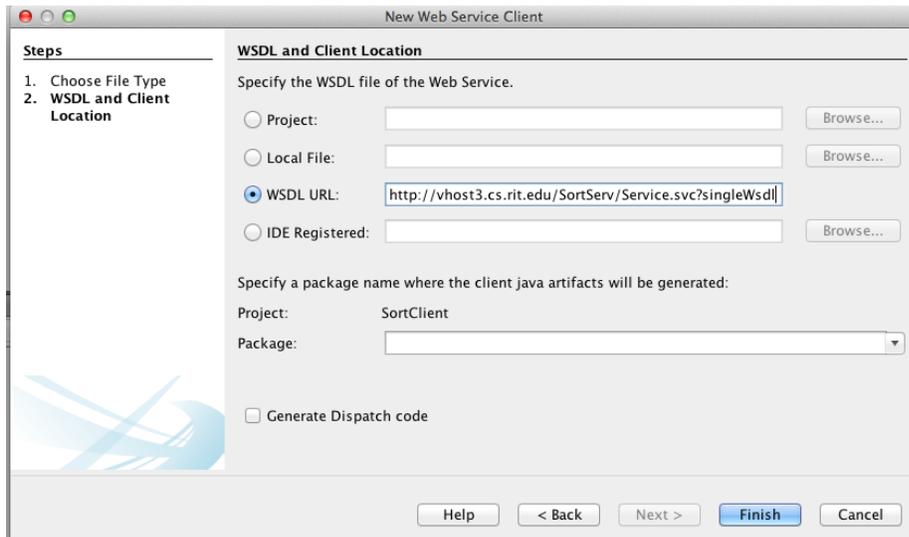
Now go to the Project Tree Structure on the left side of the window.

Right click on Project and select New and then choose Web Service Client



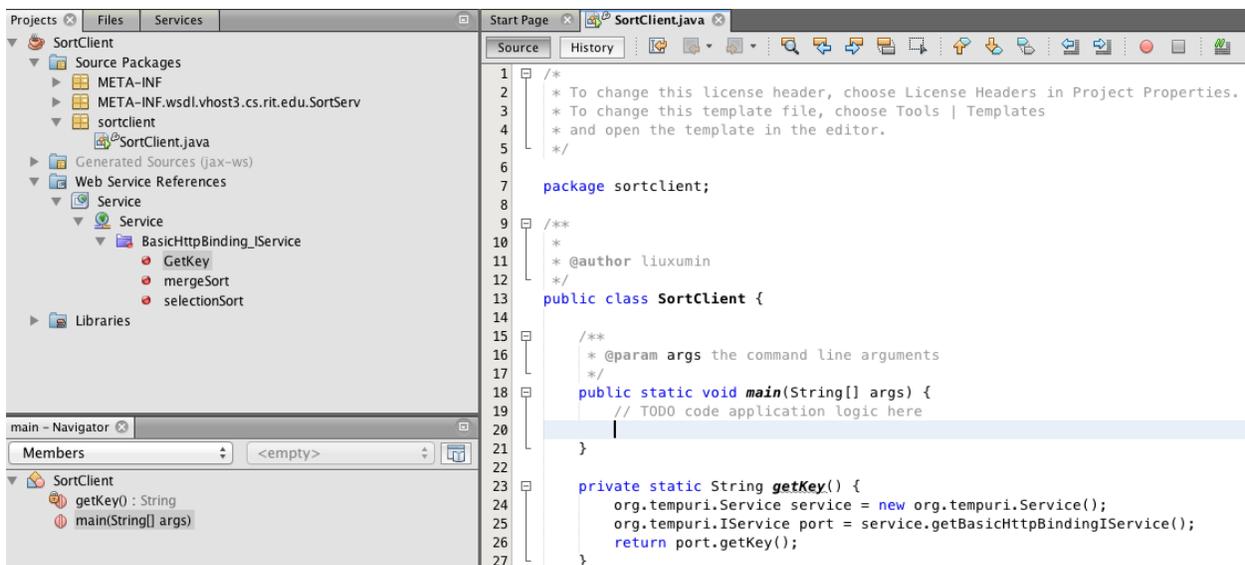
Specify the WSDL URL as: <http://vhost3.cs.rit.edu/SortServ/Service.svc?singleWsd>

Click “Finish”

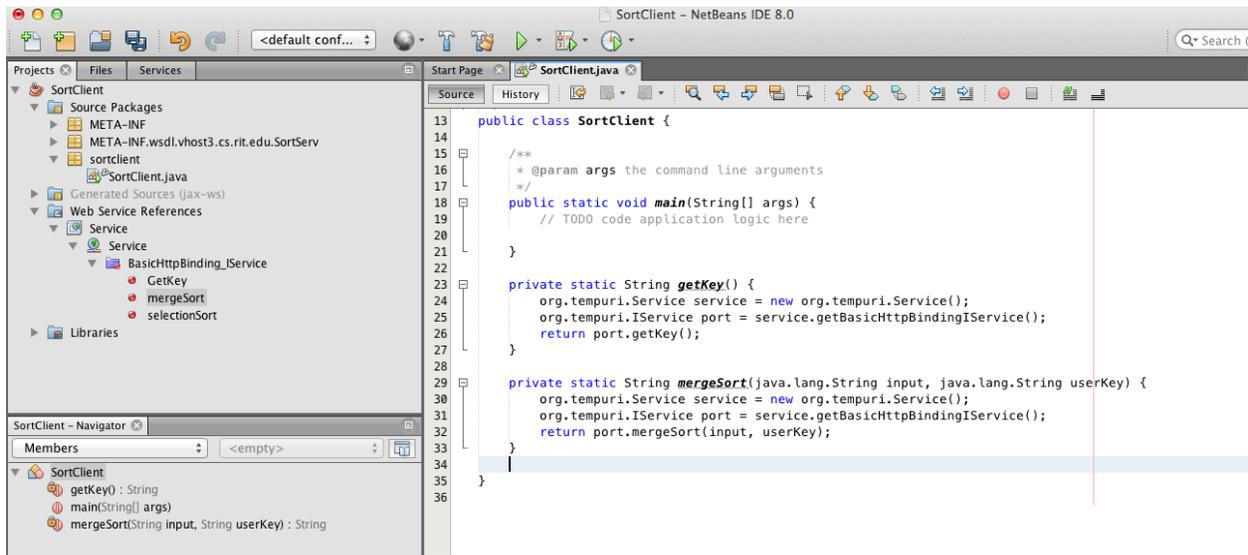


Step 3: Invoke the Service

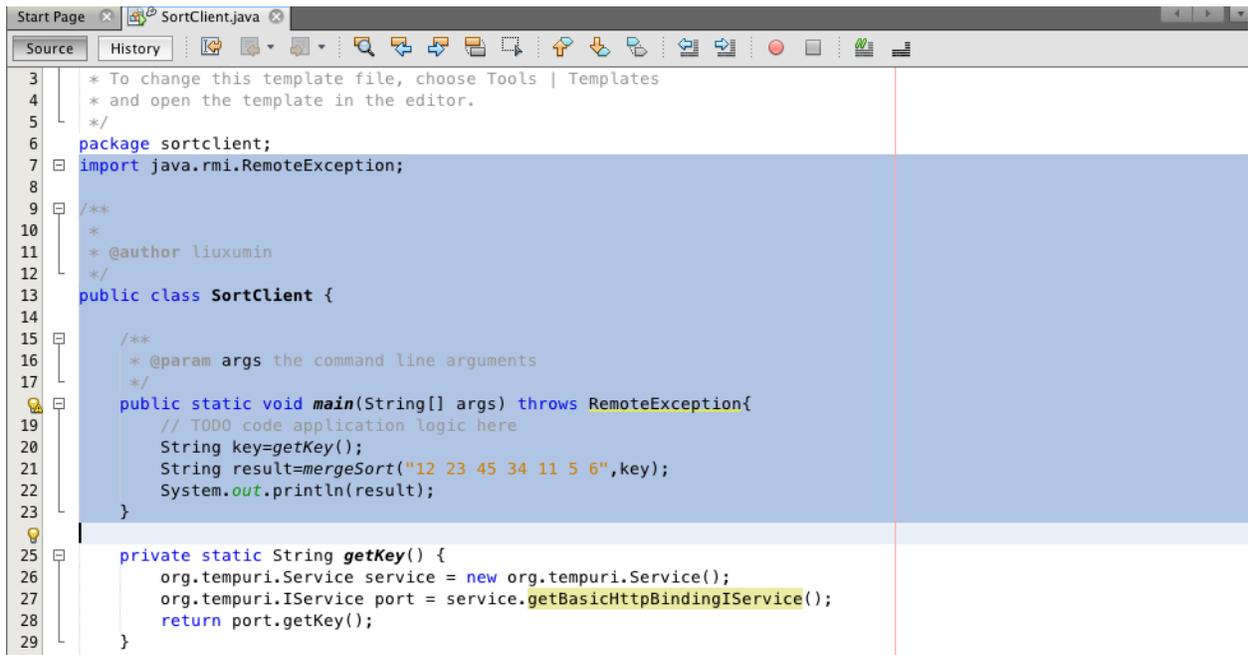
Expand the Web Service References until you see the operation lists. Drag the operation you want to invoke to the source code window, such as “GetKey”. A piece of code is automatically generated to invoke that operation.



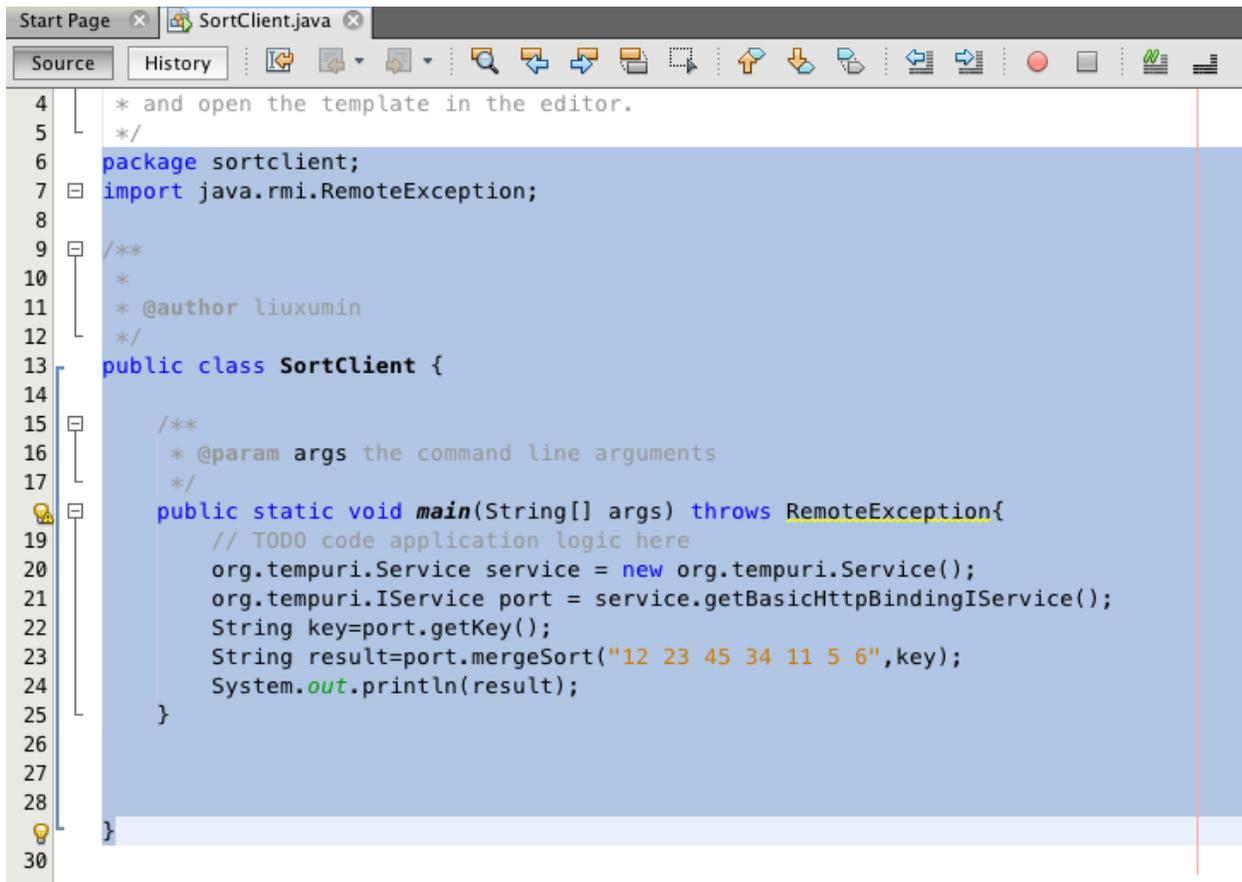
Drag MergeSort to the source code window and the corresponding code is automatically generated, too.



In the main function, add the code to call the two functions: getKey() and mergeSort(); As it is a call to a remote service, RemoteException needs to be listed in the throws clause.



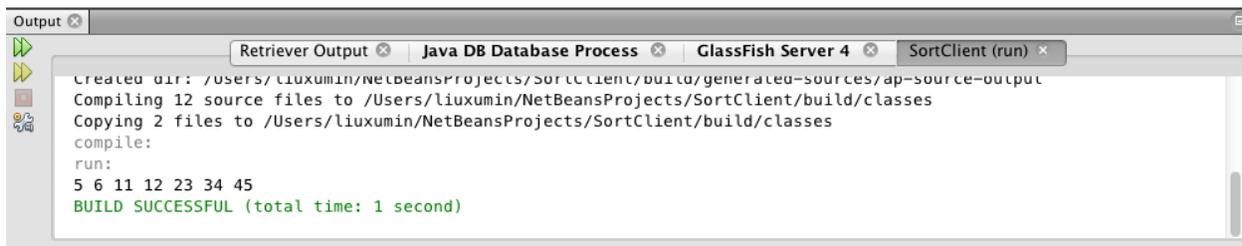
You can also manually generate code like:



```
4  * and open the template in the editor.
5  */
6  package sortclient;
7  import java.rmi.RemoteException;
8
9  /**
10 *
11 * @author liuxumin
12 */
13 public class SortClient {
14
15     /**
16     * @param args the command line arguments
17     */
18     public static void main(String[] args) throws RemoteException{
19         // TODO code application logic here
20         org.tempuri.Service service = new org.tempuri.Service();
21         org.tempuri.IService port = service.getBasicHttpBindingIService();
22         String key=port.getKey();
23         String result=port.mergeSort("12 23 45 34 11 5 6",key);
24         System.out.println(result);
25     }
26
27
28
29 }
30
```

Step 4: Run the project

Now run the project and you will get the sorting result.



```
Output
Retriever Output Java DB Database Process GlassFish Server 4 SortClient (run)
Created dir: /Users/liuxumin/netbeansprojects/SortClient/build/generated-sources/ap-source-output
Compiling 12 source files to /Users/liuxumin/NetBeansProjects/SortClient/build/classes
Copying 2 files to /Users/liuxumin/NetBeansProjects/SortClient/build/classes
compile:
run:
5 6 11 12 23 34 45
BUILD SUCCESSFUL (total time: 1 second)
```